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(54) Title: **DISTRIBUTED CELL BALANCING**

(57) Abstract: A load balancing system for dynamic balancing of load between sectors of a sectorized cellular base station, comprises a plurality of repeaters with local coverage in the sectors, and a switching matrix, for associating between the repeaters and the base station, and for allowing the repeaters to be switched between different sectors. If the system uses the base station assigned frequency band for communication with the repeaters then the system can be provided with minimal interference as an add-on to a legacy base station. An add-on may also be provided using microwave frequency and dedicated antennas.

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